CLAIM LISTING:

1. (Amended) A ferrule having an interior wall defining a hole, at least a portion of the interior wall comprising a layer of material preferentially softenable relative to the remainder of the ferrule, wherein the ferrule and the layer of material preferentially softenable relative to the remainder of the ferrule are substantially similar materials.

2. (Previously Presented) A ferrule as in claim 1, wherein the material preferentially softenable has a softening temperature lower than a softening temperature of the remainder of the ferrule.

3. (Previously Presented) A ferrule as in claim 1, wherein the material preferentially softenable has an increased absorption of incident radiation relative to the remainder of the ferrule.

4. (Previously Presented) A ferrule as in claim 1, wherein the portion of the interior wall further has a softening temperature lower than a softening temperature of a component to be inserted therein.

5. (Previously Presented) A ferrule as in claim 1, wherein the layer comprises a doped material selected from the group consisting of fused quartz, silica and borosilicate glass.

6. (Previously Presented) A ferrule as in claim 5, wherein the layer is doped with a dopant selected from the group consisting of germanium, boron, phosphorous, fluorine and combinations thereof.

7. (Previously Presented) A ferrule as in claim 6, wherein the layer comprises between about 2% and about 4% total dopant by weight.

8. (Previously Presented) A ferrule as in claim 6, wherein the layer comprises between about 2% and about 4% germanium and trace amounts of boron and phosphorous.

9. (Previously Presented) A ferrule as in claim 1, further comprising at least one of a filament, an optical fiber and a capillary tube inserted into the hole and fused therein by at least partially softening the layer.

10. (Amended) A fiber Bragg grating device comprising:

a ferrule having an interior wall defining a hole, at least a portion of the interior wall comprising a layer of material preferentially softenable relative to the remainder of the ferrule; and

a fiber including a Bragg grating disposed within the hole of the ferrule and permanently fused to the ferrule by at least partially softening the layer.

11. (Previously Presented) A device as in claim 10 wherein the Bragg grating is formed after the fiber and ferrule are fused.

12. (Previously Presented) A device as in claim 10 wherein the material preferentially softenable has at least one of: a softening temperature lower than a softening temperature of the remainder of the ferrule, and, an increased absorption of incident radiation relative to the remainder of the ferrule.

13. (Amended) A method of fusing an optical fiber into a ferrule having an interior wall defining a hole, at least a portion of the interior wall comprising a layer of material preferentially softenable relative to the remainder of the ferrule, comprising:

disposing a portion of the optical fiber within the hole;

heating the layer such that at least a portion of the layer softens and flows between the interior wall and the optical fiber; and

allowing the softened portion to solidify to form a permanently fused region between the ferrule and the optical fiber.

14. (Previously Presented) A method as in claim 13, wherein the heating comprises directing energy from a CO_2 laser onto the ferrule.

15. (Previously Presented) A method as in claim 13, wherein the layer of material preferentailly softenable has at least one of: a softening temperature lower than a softening

temperature of the remainder of the ferrule, and, an increased absorption of incident radiation relative to the remainder of the ferrule.

16. (Previously Presented) A method as in claim 14, wherein the heating comprises directing energy from at least one of: a radio wave source, a microwave source, a gas torch, a resistive element, a plasma source, a laser, an electric arc generator, or an electromagnetic energy source onto the ferrule.

17. (Amended) A method of manufacture, comprising:

providing a preform including an interior wall defining a hole;

depositing a material preferentially softenable relative to the remainder of the preform ~~ferrule~~ onto at least a portion of the hole, wherein the preform and the layer of material preferentially softenable relative to the remainder of the preform are substantially similar materials;

drawing the preform; and

cutting the drawn preform to form a plurality of ferrules..

18. (Previously Presented) A method as in claim 17 wherein the depositing is performed prior to the drawing.

19. (Previously Presented) A method as in claim 17 wherein the drawing is performed prior to the depositing.

20. (Previously Presented) A method as in claim 17, wherein the material preferentially softenable has at least one of: a softening temperature lower than a softening temperature of the remainder of the ferrule, and, an increased absorption of incident radiation relative to the remainder of the ferrule.

21. (Amended) A method as in claim 17, further comprising:

disposing a portion of a filament within the hole of one of the preforms ~~ferrules~~;

heating the layer such that at least a portion softens and flows between the interior wall and the filament; and

allowing the softened portion to solidify to form a fused region between the preform ~~ferrule~~ and the filament.

22. (Previously Presented) A method as in claim 21 wherein the filament comprises one of an optical fiber and a capillary tube.

23. (Previously Presented) A method as in claim 21 wherein the heating comprises directing a beam from a CO_2 laser onto the ferrule.

24. (Previously Presented) A method as in claim 21 wherein the heating further comprises directing energy from an energy source comprising at least one of: a radio wave source, a microwave source, a gas torch, a resistive element, a plasma source, a laser, an electric arc generator, or an electromagnetic energy source onto the ferrule.

25. (Amended) A method of manufacture, comprising:

providing a tubular member including interior walls defining one or more holes;

depositing a material preferentially softenable relative to the tubular member onto the interior walls by chemical vapor deposition; and

cutting the tubular member to form a plurality of ferrules.

26. (Previously Presented) A method as in claim 25, wherein the material preferentially softenable has at least one of: a softening temperature lower than a softening temperature of the tubular member, and, an increased absorption of incident radiation relative to the tubular member.